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ABSTRACT

Using Seligman's "learned helplessness" paradigm, androgynous and feminine women (as defined by the Bem Sex Role Inventory) either succeeded (contingent feedback) or failed (non-contingent feedback) at a concept formation task and were provided with internal (ability, effort), external (task difficulty, luck), or no causal attributions for their performance. Then a second (criterion) concept formation task was administered. The attribution manipulation was found to have no effect on any of the dependent measures and failed to interact with the other factors. For feminine subjects, failure increased the trials necessary to reach criterion on the second task ("learned helplessness"), whereas success had no effect. The performance of androgynous subjects, on the other hand, was unaffected by failure but facilitated by success ("learned competence"). Androgynous subjects responded to success by attributing it to their ability, whereas failure was attributed to task difficulty. Feminine subjects, on the other hand, attributed success and failure about equally to these two factors. Finally, whereas androgynous subjects attributed their successes in life to their ability and their failures to task difficulty, feminine subjects made the opposite attributions. The results suggest that the androgynous woman is likely to be more resistant to "learned helplessness" than is the feminine women. (Author)

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Effects of Androgyny, Attribution, and Success or Failure on Women's Cognitive Performance

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Effects of Androgyny, Attribution, and Success or Failure on Women's Cognitive Performance

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Some studies have found that males and females differ in their attributions for and expectancies of success or failure (e.g., Crandall, 1969; McMahan, 1972); others find no difference (e.g., Feather & Simon, 1971; Parson & Ruble, 1972). One explanation for this inconsistency is that women are not an internally homogeneous group. It may be proposed that an important difference among women in this context is the degree to which they possess those traits that are associated with achievement motivation and a positive problem-solving attitude -- independence, self reliance, willingness to take risks. In Western culture these traits are considered to be stereotypically masculine. Therefore, a test of the present hypothesis can be made by comparing the feminine with the psychologically androgynous woman because they differ primarily on the masculine dimension.

Thus, the experiment involved a comparison between androgynous and feminine women, as defined by performance on the Bem Sex Role Inventory (BSRI), with respect to the response to induced success or failure. Seligman's "learned helplessness" paradigm was used for this purpose. In it, Ss are first caused to succeed or fail on a task and then their performance on a subsequent task is assessed. More specifically, the success condition involves a situation in which outcomes are contingent on the responses of the S, whereas in the failure condition the outcomes are not contingent on the S's responses. The typical result of this procedure is that failure, relative to success, depresses performance on the second task and leads to a number of negative

emotional states. Both the behavioral and emotional effects are referred to as "learned helplessness."

Based on the speculations of some previous investigators, including Seligman, it was also felt that the attribution given by the subject for her performance might interact with the success/failure manipulation. Therefore, Ss were instructed to attribute their performance to either internal factors (ability, effort), external factors (task difficulty, luck), or given no attribution. Thus, the design involved the three factors of sex-role profile, success/failure, and attribution, as can be seen in Table 1. In addition, there was a no-pretreatment (and therefore no attribution) control group for

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Insert Table 1 about here

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each sex-role profile group. It will be seen that four of the cells are unfilled. These cannot possibly be filled since if there is no pretreatment task, there is nothing to give an attribution for.

Method

All of the Ss were female undergraduate students at the University of Kansas. Each S was tested individually. She was first confronted with a concept formation task on which she was given internal, external, or no attribution instructions. She was then caused either to succeed or to fail. Next, she was given a similar, although more difficult, concept formation task on which she would ultimately succeed. The dependent measures were (1) trials to criterion on the second task, (2) the causal attributions given by the S for her performance on the pretreatment task, assessed by a questionnaire, and (3) a number of cognitive and emotional responses to the success or failure experi-

ence as assessed by a series of 7-point Likert scales. Also measured were the S's causal attributions for successes and failures in life.

Because of the stronger masculine component of their personality, Androgynous subjects were predicted to be less adversely affected by failures than Feminine subjects and to reveal different attributions for their successes and failures both in the laboratory and in the "real world."

Results

Trials to Criterion

The attribution manipulation had no effect on this or on any of the other dependent variables. According to a Sex Role X Success/Failure X Attribution analysis of variance, failure led to an increase in trials to criterion in comparison to success. However, in order to see if failure depressed performance, success facilitated it, or both, it is necessary to examine the no-attribution conditions (see Table 1). According to planned comparisons, failure increased trials to criterion for the Feminine subjects, but success had no effect. For Androgynous subjects, however, failure had no effect, whereas success facilitated performance. Thus, whereas Feminine subjects demonstrated learned helplessness, by Seligman's definition, Androgynous subjects revealed what Benson and Kennelly (1976) have referred to as "learned competence."

Attributions for Training Task Performance

For Androgynous subjects, successful performance was attributed to ability (an internal factor), whereas failure was attributed more to task difficulty (an external factor). For Feminine subjects, on the other hand, the success/failure manipulation did not differentially affect performance attributions;

subjects attributed both success and failure to ability and task difficulty equally and to about the same degree as the Androgynous subjects attributed failure to task difficulty (see Figure 1).

Insert Figure 1 about here

Cognitive and Emotional Measures

Induced failure, in comparison to success, was found to be associated with (1) less motivation to persevere on the tasks, (2) greater frustration, (3) less perceived competence relative to others, (4) less perceived ability to solve the concept formation problems, and (5) greater belief that the problems were unsolvable (by anyone). Thus, the success/failure manipulation produced its expected cognitive and emotional effects, although no interactions with sex-role profile were obtained. Of interest is the finding that the Androgynous subjects, regardless of experimental condition, rated themselves as more competent relative to others than did the Feminine Group.

Attributions for Successes and Failures in Life

Androgynous subjects attributed successes in life primarily to ability and failures to task difficulty. Feminine subjects did just the reverse, attributing successes in life primarily to task difficulty (ease) and failures to (lack of) ability.

Conclusions

To conclude, perhaps the most important results of the present experiment were the differences between Androgynous and Feminine subjects in the effect of success and failure on subsequent problem-solving behavior and in their attributions for this performance. Failure detrimentally affected later cognitive

performance for Feminine subjects, whereas success had no effect. Conversely, failure had no effect on the performance of Androgynous women, whereas success facilitated it. The latter results, together with the fact that Androgynous subjects attribute both induced failures and failurss in life to task difficulty and successes to ability, may have important implications for their relative immunity to learned helplessness, as does the fact that Feminine women make the opposite attributions for their successes and failures in life. Thus, assuming that learned helplessness is most likely to occur when failure is attributed to internal, stable factors (e.g., ability), the present results suggest that, in both the laboratory and the "real world," the Androgynous woman is more resistant to learned helplessness than is the Feminine woman.

TABLE 1

Mean Trials to Criterion for Androgynous and Feminine Groups in all Experimental Conditions

	Androgynous Group			Feminine Group		
	Internal Attribution Instruction	External Attribution Instruction	No Attribution Instruction	Internal Attribution Instruction	External Attribution Instruction	No Attribution Instruction
Failure Condition	22.2	25.0	23.4	30.1	29.0	27.1
Success Condition	17.1	18.0	16.0	19.1	20.1	19.4
Control Condition			21.1			22.2

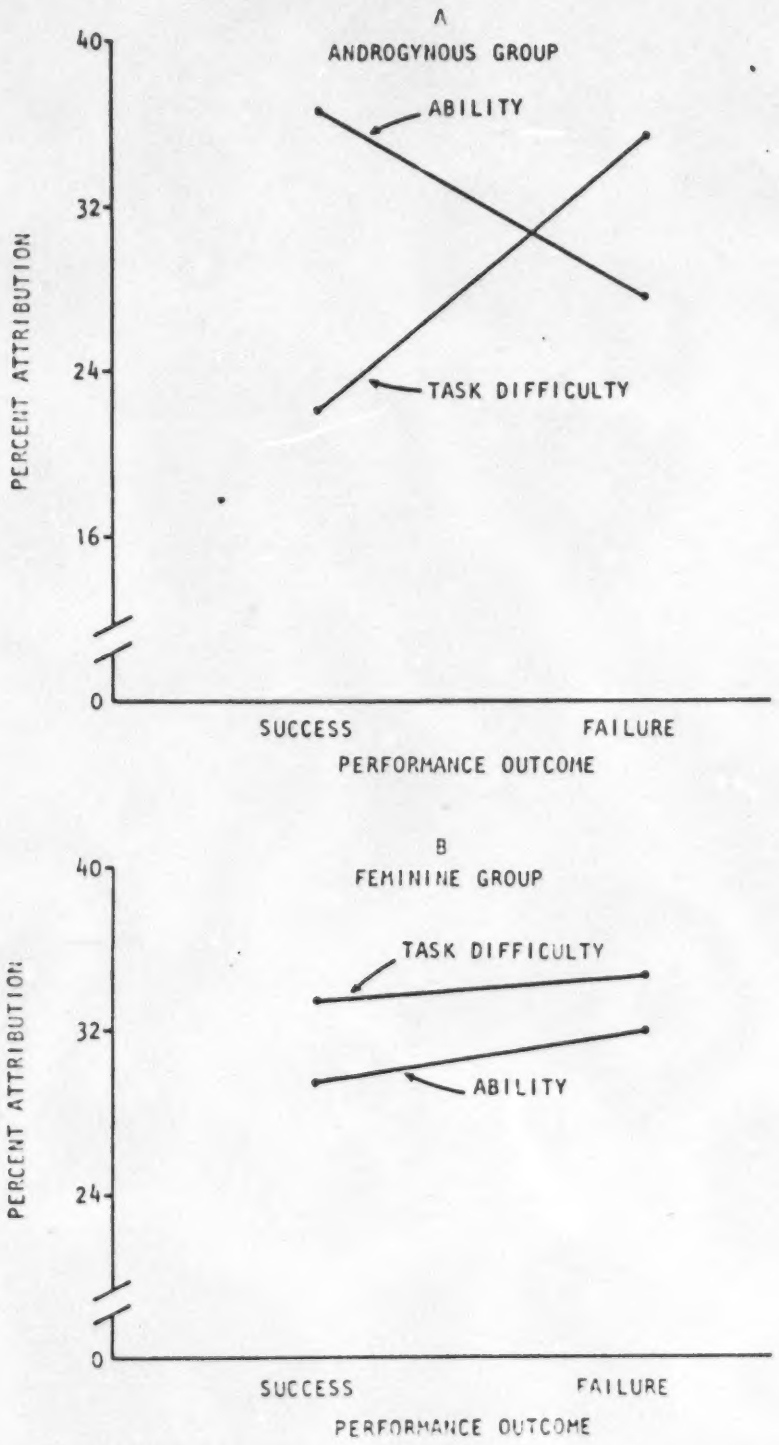

FIG. 1. PERCENT CAUSAL ATTRIBUTION FOR PERFORMANCE OUTCOME BY THE ANDROGYNOUS (A) AND FEMININE (B) GROUPS TO ABILITY AND TO TASK DIFFICULTY UNDER CONDITIONS OF EXPERIMENTALLY INDUCED SUCCESS AND FAILURE.